



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/852,810	05/10/2001	Brian R. Gareau	00-762	5489

719 7590 12/01/2006

CATERPILLAR INC.  
100 N.E. ADAMS STREET  
PATENT DEPT.  
PEORIA, IL 616296490

EXAMINER

MEINECKE DIAZ, SUSANNA M

ART UNIT PAPER NUMBER

3694

DATE MAILED: 12/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/852,810

Applicant(s)

GAREAU ET AL.

Examiner

Susanna M. Diaz

Art Unit

3694

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 13 September 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-12, 16-19, 23-26, 37, 39, 41 and 42 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12, 16-19, 23-26, 37, 39, 41 and 42 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on August 7, 2006 and September 13, 2006 have been entered.

Claims 1, 2, 4, 7-10, 12, 16, 17, 19, 23, 24, 26, 37, 39, and 42 have been amended.

Claims 13-15, 20-22, 27-36, 38, and 40 have been cancelled.

Claims 1-12, 16-19, 23-26, 37, 39, 41, and 42 are presented for examination.

### ***Response to Arguments***

2. Applicant's arguments filed August 7, 2006 have been fully considered but they are not persuasive.

Regarding the rejection under 35 U.S.C. 101, Applicant argues:

...The subject matter recited in amended claim 1 is not subjective and does not depend entirely on the person carrying out the invention. For example, the specification states: "Exemplary themes/issues may include: 'What themes/issues are repeated throughout the data set?'; What is the frequency of these themes/issues in the data set?'; 'Are there details which further support these themes/issues in the data set?....'" Contrary to the Office Action, a human does not subjectively determine a theme. Instead, a theme

is identified based on the collected and compiled responses.  
(Page 14 of Applicant's response)

It is noted that the features upon which Applicant relies (i.e., "Exemplary themes/issues may include: 'What themes/issues are repeated throughout the data set?'; 'What is the frequency of these themes/issues in the data set?'; 'Are there details which further support these themes/issues in the data set?....'" are not recited in claim 1. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Claim 6 does recite that an average data value is determined for a first and second set of quantitative questions and then a theme is determined based on a comparison of the determined average data values. While the determination of a value is an objective calculation, the determination of a theme based on a comparison of average data values is still subjective. The *result* of the claimed invention must be useful, concrete, and tangible. At best, a human user merely uses a computer to organize and present data so that the human user can yield a decision. As a matter of fact, claim 1 does not even require that a computer sort the compiled responses. Consequently, the metes and bounds of claim 1 could cover a scenario in which a human mentally sorts through the compiled responses to subjectively identify a theme. The claimed invention as a whole is effectively a system/method/computer program product used to facilitate consulting. Again, even though a computer and software may be used to organize and sort data, the human ultimately produces the core result of the invention. For example, starting on page 48 of the specification (or

Art Unit: 3694

paragraph 194 of the pre-grant publication of the instant application, PG

2003/0004778), Applicant describes the intended level of human involvement in the claimed invention:

[0194] A list of themes/issues would have been identified as results of the trend analysis step. These identified themes/issues are preferably organized into a descending order of frequency, e.g., from the highest frequency theme/issue to the lowest (step 807). This step is to be repeated for each of the data sets. The facilitator may attempt to discern any "natural break" in the themes/issues frequency. "Natural break" is defined as, for example, any indicated in the themes/issues that can be grouped together in a band of common frequency.

[0195] Subsequent to or in parallel with the above step, the averages of responses to the quantitative questions are calculated. More specifically, there are ten (10) quantitative questions in the interview guide, and twenty-three (23) quantitative questions in the employee feedback sheet, as discussed above. The averages of the responses to the quantitative questions are then sorted in a descending order (step 809). This step is also performed on those customized questions which may require quantitative responses. The sorted average values may be referred as the quantitative data.

[0196] In the next step, the quantitative data is compared with the rated data collected in relation with the questions in the individual interview guideline (step 811). For instance, an employee group may rate the (6) Communications question on the employee feedback sheet low while a management group may also rate their Communications question high. In another example, an employee group rated "Showing Full Appreciation" low while the management group rated the same question high.

[0197] The next step is to compare quantitative results in order to qualitative results to determine whether the themes/issues compliment or contradict each other (step 813). An example of a contradiction is when the management team rated recognition as "above average" while the responses in the focus groups identified lack of appreciation as a frustration when answering qualitative questions. Another example pointing to a contradiction would be when employee groups rated "Personal Rapport" and "Accessibility" low on the employee feedback sheet while the management groups identified "Building Relationships" with employees as having no problem in the responses to the qualitative questions.

[0198] Subsequently, the results of the above described steps 807, 811, and 813, are analyzed in order to identify a certain number of themes/issues (e.g., 5, 4-6, 2-8, etc.) in each data set (step 815). Themes/issues that appear consistently across all data sets are also identified. In addition, the facilitator determines whether or not these identified themes/issues have been mentioned in qualitative data in, for example, a high frequency. Furthermore, the themes/issued identified may also be compared against data collected in other types of data collection mechanisms, e.g., words & their meaning exercise, trust exercise, Gap analysis or the like.

[0199] The results of the above-step are compared with the responses to the question of "What one realistic and specific thing would you do to improve morale and employee satisfaction in the next 90-120 days?" posed in the focus group meetings (step 817).

[0200] As the last step in the data analysis step, the results obtained above are summarized (step 819) in an executive summary report, with a detailed supplement report attached thereto.

[0201] The executive summary may include information relating to one or more the following items. The first item identifies and discusses common themes/issues. The common themes/issues may include one or more of the following items to be discussed in a narrative format: a summary of basic assumptions management has on its staff and employees have of business; a summary of responses to "What's going right/improving?"; a summary of responses to "What's frustrating/disappointing?"; a summary of responses to "What one realistic/specific thing would you do in the next 90-120 days to improve employee morale and satisfaction?" The common themes may also include one or more of the following items to be discussed in a qualitative format: a summary of responses to "Is the organization a better, same, or worse place to work over the last 6 months?"; and a summary of responses to "Is senior management serious about improving employee satisfaction?"

[0202] The second item in the executive summary identifies and discusses the results of the unique focus group meetings. The results of the unique focus group activities may include, for example, one or more of the following items to be discussed in a narrative format: a summary of responses in words and their meaning exercises; a summary of responses collected in the trust exercises; and a summary of the employee feedback sheet. The results of the unique focus group activities may include, for example, the following items to be discussed in a quantitative format; and a summary of responses to employee feedback select questions.

[0203] The third item in the executive summary identifies and discusses the results of the unique individual interview activities. The results of the unique interview activities may include, for example, one or more of the following items to be discussed: a summary of responses to the rated questions (highest and lowest scoring averages); and a summary of responses to the rated questions with significant average score differences between in the response of the management team and the employee groups.

[0204] The fourth item in the executive summary identifies and discusses the results of the key action areas. In this item, one or more of the following issues may be discussed: employee suggestions by action area from "one thing" exercise; and additional consultant recommendations based on best practices.

[0205] The last item in the executive summary includes the recommended next steps. The next steps include, for example, two categories, namely, soak time questions and a next steps template. The next steps template will be described later in connection with FIG. 10. However, the following is a list of exemplary soak time questions. The facilitator may ask the members to consider answering the following exemplary questions individually and then as a member of a management team.

Even after sorting themes/issues based on a frequency, it is the facilitator who discerns any "natural break" in the frequency of themes/issues. There is no underlying objective methodology that would guarantee the same resulting analysis for various assessments of the same set of data. For example, even though a numerical average of responses to quantitative questions can be calculated, a human still decides how to interpret this numerical average. A human also decides, without any consistently guaranteed methodology, a first action to implement. For the same issue, human user A might decide to take one course of action while human user B could opt for a totally different course of action. (Additionally, it should be noted that a selected course of action could be not to act at all (i.e., keep things running status quo).) Consequently, the metes and bounds of the claims are not clearly defined since the claim scope is predominantly dependent on the human user practicing the invention and his/her subjectivity. The specification does not clarify these issues; therefore, the rejections under 35 U.S.C. 112, 1<sup>st</sup> and 2<sup>nd</sup> paragraphs are maintained as well.

### ***Claim Rejections - 35 USC § 101***

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claims 1-12, 16-19, 23-26, 37, 39, 41, and 42 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Under the statutory requirement of 35 U.S.C. § 101, a claimed invention must produce a useful, concrete, and tangible result. For a claim to be useful, it must yield a

Art Unit: 3694

result that is specific, substantial, and credible (MPEP § 2107). A concrete result is one that is substantially repeatable, i.e., it produces substantially the same result over and over again (*In re Swartz*, 232 F.3d 862, 864, 56 USPQ2d 1703, 1704 (Fed. Cir. 2000)).

In order to be tangible, a claimed invention must set forth a practical application that generates a real-world result, i.e., the claim must be more than a mere abstraction (*Benson*, 409 U.S. at 71-72, 175 USPQ at 676-77). (Please refer to the "Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility" for further explanation of the statutory requirement of 35 U.S.C. § 101.)

Claim 1 generates a result of "sorting the collected data to identify an effect of the implemented first action on the organization." As best understood by the examiner, while a computer may be used to consolidate data for analysis, the actual analysis is performed by a human. Consequently, the result yielded by claim 1 (e.g., assessment data) is subjective in nature and depends entirely on the person carrying out the invention. Such a result would not necessarily be specific, substantial, or credible because of the inconsistency of the result when repeating the recited method; therefore, claim 1 fails to produce a useful result. For similar reasons, the result of claim 1 is not substantially repeatable. The result may vary widely depending on who is practicing the recited method, his/her mood, etc. Additionally, this same assessment result is not manifested as a real-world one, thereby rendering it intangible or abstract. For example, the result may be nothing more than a decision made in the mind of a user without yielding any physical effect in the real world.



Art Unit: 3694

Similarly, any potentially significant analysis or data input is gleaned directly from human users, thereby rendering such analysis and data purely subjective. There is no manipulation of this analysis and data in a manner that yields consistent or meaningfully quantifiable results. While claims 6 and 7 recite that average data values for various sets of quantitative questions are determined and compared to further infer a theme, it is not clear that the averages of the data values for the question sets represent useful, concrete, and tangible quantitative values. Even if the average data values are quantitative in nature, it is not clear that an assessment of these average data values translates into results that are useful, concrete, and tangible. For example, the claimed invention is directed toward determining themes, but the specification implies that such a determination is made by a human. The average data values are not used in a repeatable methodology that provides consistent results when evaluating themes. Instead, a human would use subjectivity when gleaning information from the average data values. Additionally, looking at claim 4, it is still unclear who or what establishes the standards to determine whether or not communication between employees and managers are ineffectual. Without the specifics of the measures imparted by quantitative feedback and their limit to meaningful and useful values and corresponding analyses, related analyses are not useful, concrete, or tangible since the corresponding results are completely at the mercy of the subjectivity of a human user, which is not substantially repeatable. Therefore, claims 1-8, 41, and 42 are deemed to be non-statutory for failure to produce a useful, concrete, and tangible result.

Claims 16-19 and 37 recite method claims with limitations similar to those recited in claims 1-8, 41, and 42; therefore, the same rejections apply.

Claims 9-12 and 39 recite apparatus claims with limitations similar to those recited in claims 1-8; therefore, the same rejections apply. Furthermore, claims 9-12 and 39 are written in means-plus-function format. Looking toward the specification, it is not clear whether or not Applicant intended each means to correspond to a computer or human. Means-plus-function language requires corresponding structural limitations in the specification; however, the specification discloses that a human user performs much of the recited functionality. For example, does the computer actually determine a theme, an action corresponding to the determined theme, and an action assessment data reflecting an effect of the implemented action on the organization based on collected data or does the computer merely sort and present the data to then allow a human user to perform the recited analysis (claim 9)? Looking toward the specification, it appears that the human user is actively performing the recited analysis while a computer merely assists in organizing the data needed to make related decisions. Consequently (and as discussed above), the subjective nature of the analysis renders any claimed results non-statutory for failure to be useful, concrete, and tangible.

Claims 23-26 recite a system comprising a computer program product with limitations similar to those recited in claims 1-12, 39, 41, and 42; therefore, the same rejections apply. Please note that the issues of which steps are actually meant to be performed by a computer versus a human (raised more explicitly in claims 9-12 and 39) are especially pertinent to the discussion of claims 23-26. Consequently (and as

Art Unit: 3694

discussed above), the subjective nature of the analysis renders any claimed results non-statutory for failure to be useful, concrete, and tangible.

Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claims 1-12, 16-19, 23-26, 37, 39, 41, and 42 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

As discussed in the rejection under 35 U.S.C. § 101, claims 1-12, 16-19, 23-26, 37, 39, 41, and 42 do not produce a useful, concrete, and tangible result. Since the claimed results are predominantly dependent on human subjectivity, the results of the claimed invention cannot be substantially repeated. Consequently, the Examiner submits that one of ordinary skill in the art would not be enabled to consistently make and/or use the claimed invention as intended by Applicant without undue experimentation.

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

Art Unit: 3694

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 1-12, 16-19, 23-26, 37, 39, 41, and 42 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 generates a result of "sorting the collected data to identify an effect of the implemented first action on the organization." As best understood by the examiner, while a computer may be used to consolidate data for analysis, the actual analysis is performed by a human. Consequently, the result yielded by claim 1 (e.g., assessment data) is subjective in nature and depends entirely on the person carrying out the invention, thereby rendering the scope of the recited determining and analysis steps unclear. To what extent is a computer involved, if at all? Does a human merely make an arbitrary and subjective decision in his/her own mind?

Similarly, any potentially significant analysis or data input is gleaned directly from human users, thereby rendering such analysis and data purely subjective. There is no manipulation of this analysis and data in a manner that yields consistent or meaningfully quantifiable results. While claims 6 and 7 recite that average data values for various sets of quantitative questions are determined and compared to further infer a theme, it is not clear that the averages of the data values for the question sets represent useful, concrete, and tangible quantitative values, thereby rendering these claims vague and indefinite. Even if the average data values are quantitative in nature, it is not clear that an assessment of these average data values translates into results that are useful, concrete, and tangible. For example, the claimed invention is directed toward

Art Unit: 3694

determining themes, but the specification implies that such a determination is made by a human. The average data values are not used in a repeatable methodology that provides consistent results when evaluating themes. Instead, a human would use subjectivity when gleaning information from the average data values. Additionally, looking at claim 4, it is still unclear who or what establishes the standards to determine whether or not communication between employees and managers are ineffectual.

Claims 16-19 and 37 recite method claims with limitations similar to those recited in claims 1-8, 41, and 42; therefore, the same rejections apply.

Claims 9-12 and 39 recite apparatus claims with limitations similar to those recited in claims 1-8, 41, and 42; therefore, the same rejections apply. Furthermore, claims 9-12 and 39 are written in means-plus-function format. Looking toward the specification, it is not clear whether or not Applicant intended each means to correspond to a computer or human. Means-plus-function language requires corresponding structural limitations in the specification; however, the specification discloses that a human user performs much of the recited functionality. For example, does the computer actually determine a theme, an action corresponding to the determined theme, and an action assessment data reflecting an effect of the implemented action on the organization based on collected data or does the computer merely sort and present the data to then allow a human user to perform the recited analysis (claim 9)? Looking toward the specification, it appears that the human user is actively performing the recited analysis while a computer merely assists in organizing the data needed to make

Art Unit: 3694

related decisions; however, a human cannot qualify an "means" since there is no structure attributable to a human in conformance with 35 U.S.C. § 112, 6<sup>th</sup> paragraph.

Claims 23-26 recite a system comprising a computer program product with limitations similar to those recited in claims 1-12, 39, 41, and 42; therefore, the same rejections apply. Please note that the issues of which steps are actually meant to be performed by a computer versus a human (raised more explicitly in claims 9-12 and 39) are especially pertinent to the discussion of claims 23-26.

Appropriate correction and/or clarification is required.

*Because claims 1-12, 16-19, 23-26, 37, 39, 41, and 42 are so indefinite, no art rejection is warranted as substantial guesswork would be involved in determining the scope and content of these claims. See In re Steele, 305 F.2d 859, 134 USPQ 292 (CCPA 1962); Ex parte Brummer, 12 USPQ 2d, 1653, 1655 (BdPatApp&Int 1989); and also In re Wilson, 424 F.2d 1382, 165 USPQ 494 (CCPA 1970). Prior art pertinent to the disclosed invention has nevertheless been cited and applicants are reminded they must consider all cited art under Rule 111(c) when amending the claims to conform with 35 U.S.C. 112 and 101.*

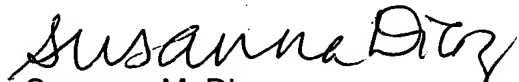
### **Conclusion**

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Susanna M. Diaz whose telephone number is (571) 272-6733. The examiner can normally be reached on Monday-Friday, 8 am - 4:30 pm.

Art Unit: 3694

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Trammell can be reached on (571) 272-6712. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Susanna M. Diaz  
Primary Examiner  
Art Unit 3694

November 25, 2006